

REMARKS

This Amendment is respectfully submitted in response to the Office Action dated June 27, 2007. The Commissioner is hereby authorized to charge deposit account 02-1818 for any fees which are due and owing.

Claims 7, 14 and 16 to 18 are rejected under 35 U.S.C. §112, first paragraph for allegedly failing to comply with the written description requirement. According to the Office Action, the description in the Specification is inadequate to sufficiently describe "a genus of modified creA genes encoding non-functional gene products".

As described in the Specification at, for example, page 4, the creA gene is responsible for carbon catabolite repression of protease production in koji molds. In particular, the creA gene encodes a gene product that binds regulatory DNA sequences responsible for blocking the transcription of proteases. Therefore, expression of this gene enhances the protease production in koji molds and, thus, the proteolytic activity of koji molds.

The Specification goes on to disclose at, for example, page 8, that protease production can be increased by modifying the creA gene. The Specification describes a number of different types of modifications that lead to an increase in protease production such as modifying the creA gene such that the resulting gene product has decreased binding affinity for regulatory DNA sequences that block the transcription of proteases. An example of this type of modification is provided in Example 3.

Another type of modification that leads to an increase in protease production includes modifying the creA gene such that the resulting gene product is not transcribed either by introducing a construct in the creA gene that gives rise to creA anti-sense mRNA preventing translation of the creA gene or by introducing a mutation that prevents transcription of the creA gene altogether. Examples of this type of modification can be found in the Specification at, for example, page 9.

Still further, the creA gene may be modified by partial or complete deletion of the creA gene. An example of this type of modification is described in Example 4. Example 5 demonstrates the ability of modified creA genes to increase proteolytic activity. Therefore,

Applicants respectfully submit that the Specification is sufficient to describe a genus of modified creA genes whose gene products have a decreased ability to inhibit the production of a protease. By including the ability of the gene product thereof to inhibit the production of a protease in Claims 7 and 18, the claims recite the function of the gene product and correlate that function with the modification of the creA gene as described in the Specification. Accordingly, a skilled artisan would recognize that Applicants were in possession of the claimed invention. Accordingly, Applicants respectfully submit that this rejection has been overcome and should be withdrawn.

Claims 7 and 14 to 18 are rejected under 35 U.S.C. §112, second paragraph for allegedly being indefinite for not claiming an essential step involving the outcome of the process. The Office Action suggests that Claim 7 is not clear as to what the outcome of the process is and whether the modification of the creA gene of the koji mold enhances proteolytic activity. Amended Claim 7 makes clear that decreasing the ability of the gene product of a modified creA gene of a koji mold to inhibit the production of a protease enhances the proteolytic activity of that koji mold. The Office Action further suggests that Claim 18, lacks an essential step in preparing a protein hydrolysate. Amended Claim 18 includes contacting the proteinaceous material with the koji mold having the modified creA gene to prepare a protein hydrolysate. Therefore, Applicants respectfully submit that this rejection has been overcome and should be withdrawn.

For the foregoing reasons, Applicants respectfully request reconsideration of their patent application and earnestly solicit an early allowance of same.

Respectfully submitted,

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